

Claims

- [c1] 1. A dynamic pressure bearing device comprising:
- a dynamic pressure face of a shaft member;
 - a dynamic pressure face of a bearing member;
 - lubricating fluid filled in a bearing space of a dynamic pressure bearing portion including a gap between the dynamic pressure faces;
 - a dynamic pressure generation means for pressing so that the lubricating fluid generates a dynamic pressure that supports the shaft member in a noncontact manner with the bearing member and in a rotatable manner relatively to the bearing member; and
 - a sliding surface layer having abrasion resistance provided to at least one of the dynamic pressure face of the shaft member and the dynamic pressure face of the bearing member; wherein
- the sliding surface layer is made up of a resin lubricating film in which many particles of solid lubricating material is dispersed, and
- a maximum diameter of the particles constituting the solid lubricating material included in the sliding surface layer is smaller than a minimum gap size of the bearing space of the dynamic pressure bearing portion.

- [c2] 2. The dynamic pressure bearing device according to claim 1, wherein the solid lubricating material has cleavage property.
- [c3] 3. The dynamic pressure bearing device according to claim 1, wherein the dynamic pressure bearing portion is made up of at least one of the radial dynamic pressure bearing portion and the thrust dynamic pressure bearing portion.
- [c4] 4. The dynamic pressure bearing device according to claim 3, wherein the radial dynamic pressure bearing portion and the thrust dynamic pressure bearing portion are formed so as to have a bearing space that is continuous to each other.